TCEQ Analysis of TCEQ Water Quality Sampling Data

Texas Commission on Environmental Quality (TCEQ) assessed water quality data for up to 71 constituents collected at the sampling site(s). The samples were collected on December 1, 2019 by TCEQ. The constituents consist of total organic carbon, chemical oxygen demand, organics, nutrients, and oil and grease. The samples were the following:

- W012069-01
- W012069-02
- W012069-03
- W012069-04
- W012069-05
- W012069-06
- W012069-07
- W012069-08

The sampling sites were adjacent to the dam on the downstream side in Star Lake Canal (samples W012069-01 through W012069-04) and upstream adjacent to the Pure Atlantic bridge in Star Lake Canal (samples W012069-05 through W012069-08).

TCEQ evaluated sample results as received from the laboratory and is not making a determination regarding the QA/QC of the samples. TCEQ used the Texas Water Quality Standards and the Texas Risk Reduction Program as references for determining the known health protective concentration levels (PCLs) in surface water. PCLs are very conservative and below levels where we would expect any health impacts. TCEQ is using these PCLs to evaluate impacts to aquatic life and human health.

No constituents exceeded their known PCL at the sampling site(s).

Table 1: Assessment of Laboratory Results

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	W012069-01	W012069-02	W012069-03	W012069-04	W012069-05		
Number of Constituents	4	71	61	1	4		
Number of constituents							
analyzed but not detected							
(not detected above the							
method detection limit or	0	70	5 0	1	0		
quantitation limit)	0	70	58	1	0		
Number of constituents							
detected above the							
method detection limit or	4	1	2	0	4		
quantitation limit	4	1	3	0	4		
Number of constituents							
detected but below their	1	1	2	0	1		
known PCLs	1	1	3	0	1		
Number of constituents							
that exceeded their	0	0			0		
known PCLs	0	0	0	0	0		
Number of constituents							
that are still pending	0	0			0		
further TCEQ evaluation	0	0	0	0	0		
Number of constituents							
that do not have a PCL or							
are assessed with other	0	0			2		
constituents*	3	0	0	0	3		

^{*}The water quality parameters ammonia, total Kjeldahl nitrogen, and total organic carbon, are not related to human health; therefore it is not appropriate to develop a human health comparison value to evaluate this parameter. There is no surface water comparison value and consequently it will not be evaluated. These water quality parameters are not directly related to the incident, and the TCEQ is evaluating the chemicals that are directly related to the incident. C6-12, C12-28 and C28-35 range hydrocarbons, as well as total petroleum hydrocarbons, are included in the assessment of oil and grease. Therefore, these constituents are not assessed individually.

Table 1 continued: Assessment of Laboratory Results

	W012069-06	W012069-07	W012069-08
Number of Constituents	71	61	1
Number of constituents			
analyzed but not detected			
(not detected above the			
method detection limit or			
quantitation limit)	71	60	1
Number of constituents			
detected above the method			
detection limit or			
quantitation limit	0	1	0
Number of constituents			
detected but below their			
known PCLs	0	1	0
Number of constituents that			
exceeded their known PCLs	0	0	0
Number of constituents that			
are still pending further			
TCEQ evaluation	0	0	0
Number of constituents that			
do not have a PCL or are			
assessed with other			
constituents*	0	0	0

^{*} The water quality parameters ammonia, total Kjeldahl nitrogen, and total organic carbon, are not related to human health; therefore it is not appropriate to develop a human health comparison value to evaluate this parameter. There is no surface water comparison value and consequently it will not be evaluated. These water quality parameters are not directly related to the incident, and the TCEQ is evaluating the chemicals that are directly related to the incident. C6-12, C12-28 and C28-35 range hydrocarbons, as well as total petroleum hydrocarbons, are included in the assessment of oil and grease. Therefore, these constituents are not assessed individually.